A Class ACT

Linking
Research
& Education

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What's a person to do?

The Internet has been touted as the great equalizer [assuming, of course, that one has a computer, modem and Internet Access]. It really has no central authority-an artifact of the Cold War. It is sort of electronic mob-rule. Therein, of course, lies both its strength and its greatest weakness. One is free to do as one will, without recourse to the dictates of Them.

However, it is hard to comprehend and, until recently, nearly impossible for the "ordinary" user to use the Internet. More and more sources are to be found on the Internet and the heady brew of instant access to worldwide information is being stirred by the addition of more and more resources: useful, trivial, and some, downright weird. For example, during the recent Christmas season, the computerized child could e-mail Santa: santa@newslink13.com, listen to *Jungle Bells* on the WWW at http:// north.pole.org and shop at a "virtual" workshop at http:// northpole.net.

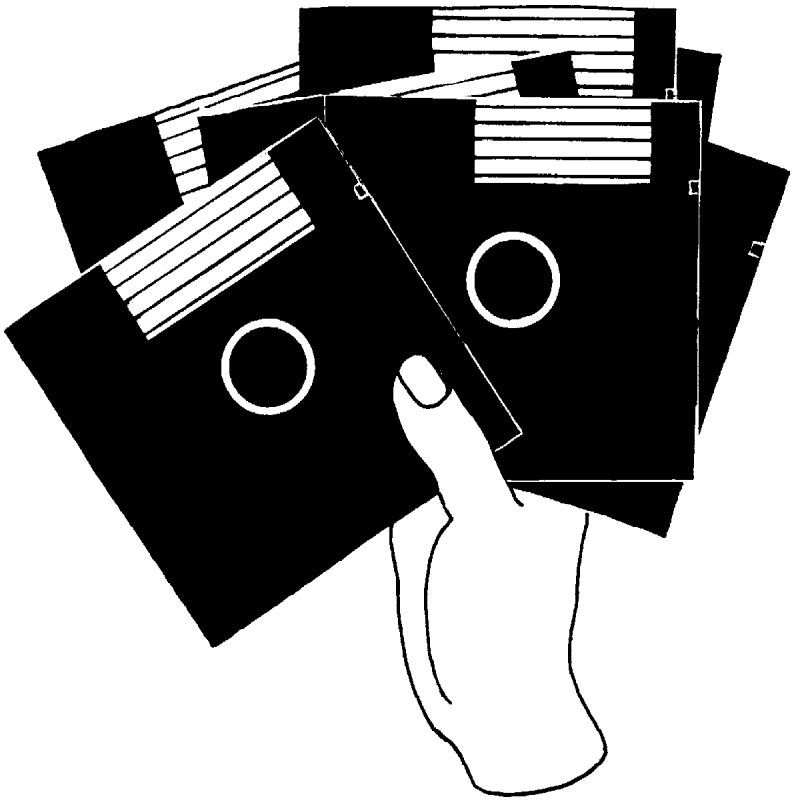
Now, one can visit a museum and peruse its contents without leaving your terminal. Go ahead, visit the Louvre or the Field Museum of Natural History: its just a mouse click away. Last April, the Oriental Institute of the University of Chicago opened its collection to the Internet and has been visited by thousands of users from around the world.

In the Fall, the Field Museum placed part of the "Life Over Time" exhibit on the Internet and has been drawing computer visitors at the same rate as "real" attendees: 25,000 visitors a week. They will probably be joined by the Art Institute, the Science & Industry Museum, and the Chicago Historical Society. These organizations are considering the Internet a way for those too far for a physical visit to enjoy the museum's holdings.

Field Museum http://www.bvis.uic.edu/museum/index,html
Oriental Institute http://www.oi.uchicago.edu/oi/default.html

--The Editor

In This Issue:



Finding What You Need When You Need it!

Puttin' the CAP on Science. Imagine having almost any science activity, article, form or experiment at your fingertips. Imagine not having to rifle through files to find just the right activity or having to retype that favorite activity to update it. ScienceCap attempts to do just that. There are more than 3000 pages of activites, experiments, clip art and so forth on the CD-ROM that comprises the program. Many agencies [such as NASA], companies [such as Estes Industries] and individual teachers have contributed activites, drawings, etc. to the project.

The system includes search features so that activities can be located easily. The program is divided into 18 units. Once found, the file can be altered to fit the particular teacher's requirements and then printed out.

As the author of the CD says, it is possible to find all of these activities, or close facsimilies, in many other areas. The real advantage to ScienceCap is that they are under one "roof", so to speak. Instantly accessible, modifiable using the companion Clarisworks program the ScienceCap offers a very seductive resource.

Science Cap is available from:

DEMCO
1-800-831-0678 [for the demo package] or
1-800-356-1200 [to order]

System requirements are:

MacIntosh Computer and CD-ROM.
4MB or RAM (System 7) or 2MB of RAM (System 6.05)

Pricing: The complete package with Hypercard Player and Clarisworks is $699.00.
Other options & rates are available as are site licenses and labpacks.

Newton News

by Steve Sample (ssample)

GENERAL BOLOGNA

Since the ACT newsletter is published only four times a year, a great deal can happen and NEWTON's evolution is still continuing. The last issue offered some of the moderators and their assignments and I will list the current list of moderators at the end of this note. It is these people who really make NEWTON the success it has become. If you would like to get a sense of this success, just check the number of logons between your visits.

NEWTON has become a huge source of information, special interest sections and activities that can please just about everyone. As a matter of fact, the system has become so large that "old fogies" like myself now find it difficult to cruise through our bbs without expending a great deal of time. There are some areas that I only see once a month or so because of the size and amount of usage NEWTON is experiencing. For, like all the other moderators, it is my responsibility to keep my assigned section(s) in order and, frankly, that is taking most of my time.

SO— what can you do as a user to keep things under control so to speak in your using NEWTON. Certainly don't try to work the entire board at one sitting. If you are like me, you have your special areas of interest and these should be the primary areas of access when you are on line. E-mail being first for me and then I check the WALL for entertainment purposes. I also like to get into the Teacher I and Teacher II areas because they have become very busy with the addition of the Kidsphere people. You don't want to miss some of the tremendously valuable information and materials showing up from that newsnet service.

MACROS

If you are familiar with the use of macros, these have become very useful in quick access into NEWTON. I should point out that not all telecommunication programs come with the ability to use macros, but more of the newer versions do. They make life a lot easier. There are many programs available that work macros outside of the program you are using, which means they can be used with anything you happen to use on your computer. Check your computer catalogs for more information on what is available. Macros are developed by "training" the macro program to go through a series of steps that are remembered and saved for

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Doing a Quality Telecom Project

by Nick Repkin

Recently I had the opportunity to attend a Telecom Training session at Argonne National Laboratory.The purpose was to be able to access the Internet as well as teach Internet tools to other teachers.

One of the things that I learned indirectly from the Telecom Training workshop was how to select a telecommunications service, such as America Online, Scholastic Network, or CompuServe to look for particular projects to work with my students. I found out that I can go into one of these commercial services and find a particular project in a folder in chronological order and with a printed history of what the project is about and by when it must be done. I also found that when a project is finished, it is archived so that others can read it.

Another way teachers can get their students involved in tecommunications is to use Internet LISTSERVs such as Kidsphere. I learned about Kidsphere by using NEWTON(the electronic bulletin board at Argonne). Teachers can explore NEWTON under groups section. Then they can go to TeacherI and TeacherII sections for further exploration.

LISTSERVs contain a great deal of diverse topics, but if teachers persist, they can pick out the telecommunications projects rather quickly. In fact, I like the Internet LISTSERV projects because they often have an international focus which most commercial services such as e-World and CompuServe do not have.

Here are some questions to consider if any these services are to be beneficial:

- Does the service have an educational section? If there isn't an educational section, this may mean that there are no school projects in existence!
- Does the service have many active users? If there are only a few listed projects, chances are that you may not find the project you would be interested in.
- Is the service easy to use? How simple is it to upload and download information from your computer to the main computer? Teachers should be able to send their students' projects with the as few simple commands as possible.
- Is the service relatively inexpensive to use? Is the project being done on a 800 number but you must pay for the services anyway? Some educators feel that 200 or 300 dollars is a reasonable price to pay for a year's service.

A good project proposal should also contain the following:

- A Title. Make sure the title is appropriate to the project.
- State the Purpose. Each project should explain the goals or the purpose of the

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future use by the program. You turn on the macro and perform the steps within the telecommunication program just like you would normally work it. The macro remembers each step you take. When you are at the point where you want the macro to stop, you tell it to stop, whereby you save the macro as a file (this is automatically done for you by the macro program). When you use the macro the next time, it repeats all of your steps exactly as you went through them during the "training" session. The macro program prompts you to indicate a series of keys to activate the saved macro, which is usually a function key or the option key and a letter. I set all my macros to start from the main page of NEWTON and these preprogrammed (macros) routines get me directly into the topic area I want without any effort and thought (believe me, my thoughts are become hard to come by!). This tool not only allows for fast access, but also can organize your routines when using NEWTON or any other telecommunication activities for that matter. Physics teachers need to take note of the new publication that is automatically uploaded in the Group Discussion, Publication section. This publication comes out of Pennsylvania and is very much worth your time and effort in viewing. We have received all of the back issues and they are all worth the downloading time.

This will not be the end of acquiring other publications. If you know of publications that are free and you think would enhance the offerings of NEWTON, please advise me at "ssample" within NEWTON.

I'm in the process of asking some of the scientific supply houses to allows us to upload their catalogs and special publications. As of this writing, the Carolina Biological Supply Co. has given us the go ahead in offering some of the Carolina Tips they publish at various times. Something to look forward to->

Speaking of this sort of thing, the Nature Bulletins are all on board (600+ issues) and we can thank Christine O'Brien for her efforts of scanning all 600+ of these gems into her own computer. It took about three months to accomplish this task on her "free" moments. (I wonder if FREE is the right word to use?) Christine is an important support and acts as an administrating assistant for our system operator (sysop) Christopher Baker.

Most of you are aware of the Pentium Chip controversy and NEWTON's backbone is the same device. If you have had any problems with NEWTON, blame it on this chip and send a nasty note to the sysop. I'm just kidding. Actually, NEWTON has functioned rather well since the addition of the Pentium chip processor last September and we have found nothing that would indicate that it has interfered with NEWTON's operations. If you need to use arithmatic operations,however, get a MAC.

:-)

Easter Eggs

Telecommunications

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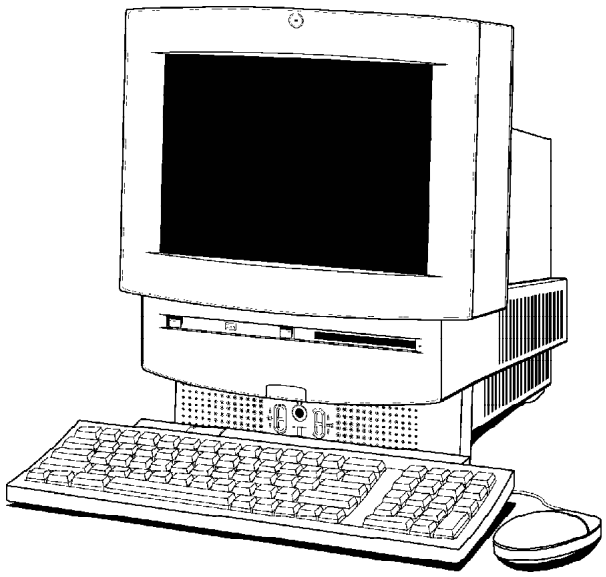


Do you know what an Easter Egg is? In the world of the Macintosh, an Easter Egg is a hidden surprize, left behind by those playful little programmers. The main Mac Easter Egg is found by doing this:

If you are running System 7:

press the Option Key and choose About the Finder under the Apple menu. You'll see a mountain. Wait and you will see the credits roll by.

Do this again, but this time hold down both the Command and the Option Keys: you will see an unusual pointer.

-the editor

project.

• Age level instead of grade levels. Most projects work best when they are limited to a certain age group. Grade levels may differ in different parts of the world but using age level will be more important.

• Time line. The projects should have a starting date, dates of exchange of information, and ending date. Better yet, if the project gives a quick overview or time line of what will happen during each part of the project.

• Subject area. Try to state the subjects that will be necessary or crucial to the project.

• Number of participants or classes. Indicate whether this project is limited to a specific number of classes or if there is open-enrollment.

• Sponsor. Include your name and e-mail address so that you can be contacted for further questions and information.

•Response date. Provide a date by which other classes must respond when they will participate in the project.

To have a successful telecom project, teachers need to remember that they must provide a definite structure to their projects. They also need to remind participating classes of the dates for exchanges and purposes of each exchange. The success of the projects will depend on other factors as well. For example, those projects that will succeed will be projects that will generate excitement and enthusiasm among students who participate.

TRAC Follow-ON Awards

by Lou Harnisch

Since 1989, the DOE Teacher Research Associates Program, TRAC, has been a great opportunity for teachers to join ongoing research projects with a scientist to gain authentic insight and experience into real world-class research. In addition, teachers share their own experience with colleagues and develop specific projects to transfer some of their "insight" back to their school community. The summer research experience occurs during an eight week period. In the last week of their appointment, each participant presents elements of his/her research experience and details their classroom project, also called a "transfer plan". In the last three years, DOE has made funds available to each participating Laboratory to assist in the participants in implementing their transfer plan. Last summer these funds were allocated on a competative basis, so the most "deserving" projects were awarded.

All TRAC presentations and FOA applications were evaluated by the Division of Educational Programs staff committee which included: Sam Bowen, Deon Ettinger, Lou Harnisch, Louise Monegain, Duane Turner (93 TRAC participant), and Paul Tuss. In a final meeting in mid-August this group met to prioritze and recommend awards as indicated below.

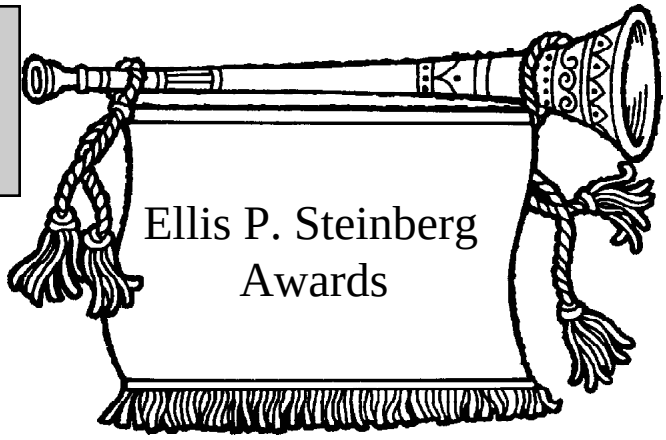
Regina Long, $100, Two Eagle River Indian Reservation (MT)
Michelle Lenz, $1200, Regina Dominican HS
Stan Natonek, $1200, Eisenhower HS
Patricia Geringer, $1000, Lindbloom HS
Edward Kunitz, $700, Broadview Academy
Gwendolyn Williams, $1000, Naperville Central HS
Aina Holmes, $1000, New Concept Development Center
Bernard Adkins, $500, Wayne HS (WV)
George Marino, $220, Provisio West HS
Mark Linnerud, $130, Morgan Park Academy
Gerald Ballmann, $200, Middleburg HS (FL)
Flora Pitchford, $200, Southeast Halifax HS (NC)
Gary DiCioccio, $100, West Mifflin HS (PA)
Emma Williamson, $200, Lockport HS

The evaluation committee wishes to commend these teachers, and the whole 1994 TRAC group, for their ideas, plans, and enthusiasm and a successful transfer of their summer experience. Congratulations!

A final note: The 1995 TRAC selections for both National and Regional (local) participants have been completed and appointment offer letters have recently been mailed. This year the deadline for the local selection was about three months earlier than last year, moved from late February back to late November.

"Fundamental Science" Returns by Popular Demand

Argonne Community of Teachers is planning a class to help teachers clarify and become comfortable with basic scientific principles that underpin a broad range of scientific disciplines and topics. Discussion will be directed to a number of physical and life science topics and particularly to the current understanding of theory and modeling as these activities relate to the scientific process in general. The group will be lead by Argonne scientists, Samuel Bowen and Deon Ettinger. *Science Matters* (Trefil & Hazen) will be the primary hardcopy resource. The class will be held on consecutive Wednesday evenings beginning March 1 and concluding April 19, 5-8 PM. Course fee is $40 which includes the textbook. 2.0 semester hours of graduate credit is being planned (not yet confirmed) for an additional fee of $80. The class is limited to 30 educators. The model for this program was conceived and led by the late, Ellis P. Steinberg, and assisted by Deon Ettinger in the Fall of 1992. The class is returning by popular demand. To obtain more information or to register for the class, please contact Carol Przyzycki at 708-252-5448.



The 1994 Ellis P. Steinberg Awards for pre-college Science Teaching were announced. The recipients are:

Thomas Buller

&

Judith LaChance-Whitcomb

The award consists of $500.00 and an award plaque. The awards were presented at a luncheon at Argonne on January 30, 1995.

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